



**TRI-MAG, Inc.**  
*your* POWER Specialists

1601 N. CLANCY CT. • VISALIA, CA 93291  
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# DZ065V SERIES

## 65 Watts For Medical & Industrial Applications

### 90 Watts PEAK Current



### GENERAL SPECIFICATIONS

|                                  |   |
|----------------------------------|---|
| Input Voltage.....               | 90VAC to 264VAC   |
| Input Frequency.....             | 47Hz to 63Hz  |
| Inrush Current (cold).....       | Less than 30A at 115VAC, 25°C                                       |
| Operating Temperature.....       | 0 to 60°C   |
| Derated.....                     | 2%/°C;>50°C   |
| Storage Temperature.....         | -40°C to 85°C   |
| Cooling.....                     | Free Air Convection   |
| Efficiency.....                  | 85 Typical  |
| Holdup Time.....                 | >12ms at 115VAC   |
| Overvoltage Type.....            | Latching  |
| Overload Protection.....         | Auto Recovery   |
| Short Circuit protection.....    | Auto Recovery   |
| Earth Leakage.....               | 300µ Max @ 240VAC   |
| Designed in full compliance with | UL 60950-1, UL60601-1<br>CSA 22.2 #601-1,#234<br>EN60950, EN60601-1 |
| EMI .....                        | FCC "B"<br>EN55022 "B", EN55011 "B"                                 |
| EMS.....                         | EN61000-4-2,-3,-4,-5,-6,-8,-11                                      |

### DESCRIPTION

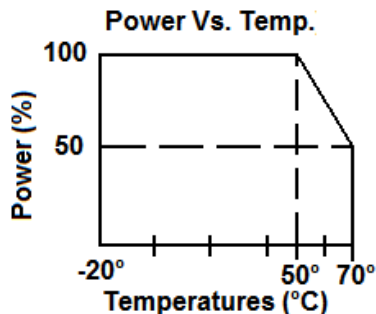
DZ065V series is a universal input power supply. The series is a 65 watts power supply in the size of 2"x 4" with a wattage density of 6.88W/in<sup>3</sup>. The efficiency can reach up to 85%.

### FEATURES

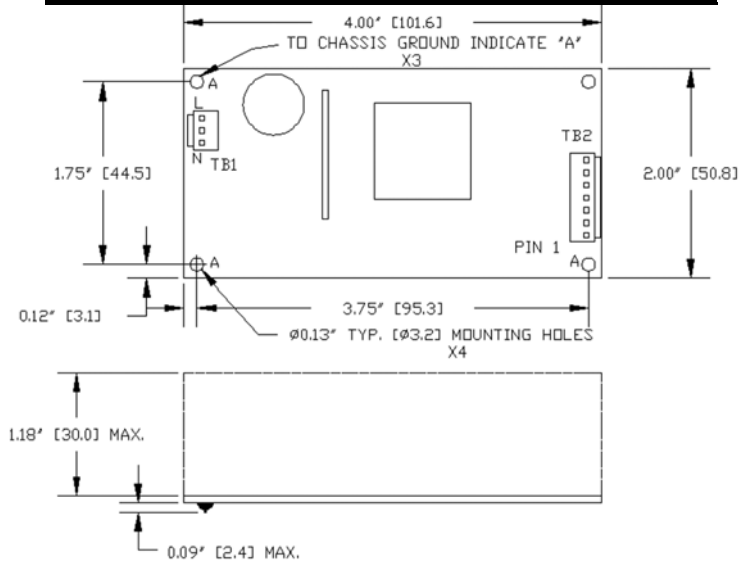
- EMI FCC Class B
- No Minimum Load Required
- Single Output
- Universal input 90VAC to 264VAC
- Low Leakage
- Double Fused

### APPLICATIONS

- Computer Peripherals
- Telecommunications
- Tape Drives
- Test Instrumentation Product
- Data Acquisition
- Medical & Dental



### MECHANICAL SPECIFICATIONS



Size: 4.0" X 2.0" X 1.18" (101.6mm X 50.8mm X 30.6mm)

- TB1—AC input : JST B2P3-VH or equivalent
  - TB2—DC output : JST B4P-VH or equivalent (Single Outputs)  
: JST B6P-VH or equivalent (Multiple Outputs)  
: JST B7P-VH or equivalent (Multiple Outputs)
- Mounting holes: 1.75" X 3.75" (44.5mm X 95.3mm)



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### OUTPUT SPECIFICATIONS

| Model     | Watts | Voltage (Vdc) | Load (A) |      |      | Tolerance<br>± | Ripple & Noise | Regulation |       |
|-----------|-------|---------------|----------|------|------|----------------|----------------|------------|-------|
|           |       |               | Min.     | Rate | Peak |                |                | Line       | Load  |
| DZ065V-6  | 65    | +5V           | 0        | 10.0 | 18   | 1%             | 50 mV          | ±0.5%      | ±0.5% |
| DZ065V-7  | 65    | +12V          | 0.1      | 4.8  | 7.5  | 1%             | 100 mV         | ±0.5%      | ±0.5% |
| DZ065V-8  | 65    | +15V          | 0        | 4.8  | 6.0  | 1%             | 100 mV         | ±0.5%      | ±0.5% |
| DZ065V-9  | 65    | +24V          | 0        | 2.7  | 3.7  | 1%             | 200 mV         | ±0.5%      | ±0.5% |
| DZ065V-14 | 65    | +48V          | 0        | 1.4  | 1.35 | 1%             | 200 mV         | ±0.5%      | ±0.5% |
| DZ065V-18 | 65    | +3.3V         | 0        | 10   | 10   | 1%             | 50 mV          | ±0.5%      | ±1.5% |
| DZ065V-1  | 65    | +5V           | 0        | 3.0  | 5.0  | 1%             | 50 mV          | ±1%        | ±3%   |
|           |       | +12V          | 0        | 3.0  | 5.0  | 5%             | 100 mV         | ±1%        | ±3%   |
|           |       | -12V          | 0        | 0.3  | 1.0  | 5%             | 100 mV         | ±1%        | ±5%   |
| DZ065V-3  | 65    | +5V           | 0        | 3.0  | 5.0  | 1%             | 50 mV          | ±1%        | ±3%   |
|           |       | +12V          | 0        | 3.0  | 5.0  | 5%             | 100 mV         | ±1%        | ±3%   |
| DZ065V-19 | 65    | +3.3V         | 0        | 5.0  | 7.0  | 1%             | 50 mV          | ±1%        | ±3%   |
|           |       | +5V           | 0        | 3.0  | 5.0  | 5%             | 50 mV          | ±1%        | ±3%   |
|           |       | +12V          | 0        | 0.7  | -    | 5%             | 100 mV         | ±1%        | ±3%   |
| DZ065V-5  | 65    | +5V           | 0        | 4.0  | -    | 1%             | 50 mV          | ±1%        | ±3%   |
|           |       | +24V          | 0        | 1.5  | -    | 5%             | 200 mV         | ±1%        | ±3%   |

**Note:** Contact factory for Safety Agency Approved status.

1. Each output can provide up to peak load temporarily. Continuous staying in more than rated load is not allowed.
2. At factory, in 60% rated load condition, each output is checked to be within voltage accuracy.
3. Line regulation is defined by changing ±10% of input voltage from nominal line at rated load.
4. Load regulation is defined by changing ±40% of measured output load from 60% rated load.
5. The ripple and noise is measured by using 15MHz bandwidth limited oscilloscope and terminated each output with a 0.47 µF capacitor at rated load and nominal line.
6. Hold up time is measured from the end of the last charging pulse to the time which the main output drops down to 95% output voltage at rated load and



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**DZ065V SERIES 65 WATT— PIN ASSIGNMENT**

| Pin<br>Mod | 1    | 2   | 3   | 4     | 5     | 6     | 7     |
|------------|------|-----|-----|-------|-------|-------|-------|
| DZ065V-1   | -12V | +5V | +5V | GND   | GND   | +12V  | +12V  |
| DZ065V-3   | N/C  | +5V | +5V | GND   | GND   | +12V  | +12V  |
| DZ065V-6   | GND  | GND | GND | +5V   | +5V   | +5V   |       |
| DZ065V-7   | +5V  | GND | GND | GND   | +12V  | +12V  |       |
| DZ065V-8   | N/C  | GND | GND | GND   | +15V  | +15V  |       |
| DZ065V-9   | +5V  | GND | GND | GND   | +24V  | +24V  |       |
| DZ065V-14  | N/C  | GND | GND | GND   | +48V  | +48V  |       |
| DZ065V-18  | N/C  | GND | GND | +3.3V | +3.3V | +3.3V |       |
| DZ065V-19  | +12V | +5V | +5V | GND   | GND   | +3.3V | +3.3V |
| DZ065V-5   | +5V  | GND | GND | GND   | +24V  | +24V  |       |

**ENCLOSURES (optional)**

Note: Package options are available for this series, EU type (U shape) and EC type (Enclosed)

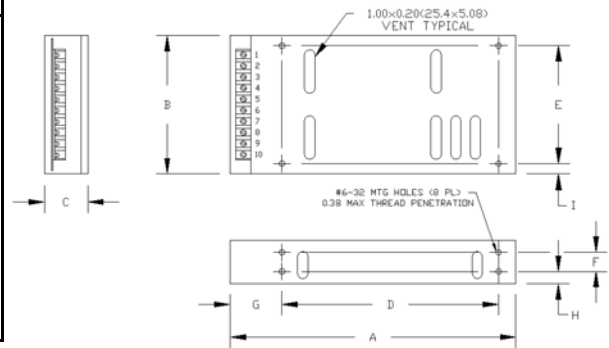
**EC**



**EU**



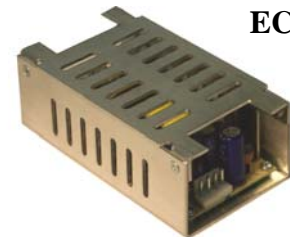
| Figure | Inches | (mm) |
|--------|--------|------|
| A      | 5.00   | 127  |
| B      | 2.77   | 70.4 |
| C      | 1.60   | 40.6 |
| D      | 2.65   | 67.3 |
| E      | 2.00   | 51   |
| F      | -      | -    |
| G      | 1.00   | 25.4 |
| H      | 0.80   | 20.3 |
| I      | 0.38   | 9.7  |
| J      | 2.50   | 63.5 |



**EUS**



**ECS**



\*Note DY040 pictured in chassis

Our Standard power supplies, the DZ065 Series, can be installed into a fully enclosed chassis or in a 'U' shape chassis as an option. These options offer two mounting planes to choose from. The fully enclosed option help to reduce radiated noise.